

STATE OF NEW HAMPSHIRE DEPARTMENT OF ADMINISTRATIVE SERVICES

BUREAU OF PUBLIC WORKS DESIGN & CONSTRUCTION POB 483, 7 Hazen Drive – Room 250

Concord, New Hampshire 03302-0483 Phone (603) 271-3516, Fax (603) 271-3515

Concord Steam Plant Study

Goals

Make an informed decision regarding whether the State should renew a current lease with Concord Steam to use a state owned building and infrastructure to operate a commercial steam plant. If so, for how long and under what terms?

Determine the condition of the existing steam plant including the building itself, fuel tanks, all boilers, associated equipment, chimney, hazardous waste and steam and condensate lines within the building and throughout the Office Park South. Establish a list of short term (0-10 years) and long-term (11-30 years) improvements that must be completed to the building and steam infrastructure. Provide cost estimates and proposed schedule

Determine the impact to existing Concord Steam customers if the State does not renew its lease with Concord Steam.

Determine what the cost would be if the State where to raze the steam plant.

Determine the financial impact to the State if it decides to migrate from Concord Steam to another heating source. Determine the financial impact to the remaining customers if the State migrated its current Concord Steam customers to another source. Determine the financial impact to the remaining customer base if the City and the State migrated from Concord Steam to another heating source.

Inventory and Condition of Existing Steam Plant

- Building and Smoke Stack Condition
- Boilers and Associated Equipment
- Steam and Condensate System including valves, lines and meters (within the plant and throughout the campus)
- Electric Generation Equipment
- Hazardous Waste Estimates
- Define short term building and infrastructure improvement needs and costs
- Define long term building and infrastructure improvements needs and costs



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Lease Renewal vs. Shut Down and Closure of the Plant

- Determine the financial impact to Concord Steam customers if the State does not renew the current lease with Concord Steam and they are forced to relocate the steam plant. (Cost to relocate to new plant)
- Determine the cost benefit (if any) to Concord Steam customers if Concord Steam is allowed to enter into a new lease with the State to operate the steam plant at the current location with necessary plant and infrastructure improvements.
- Conduct a cost benefit analysis and determine if it would be more beneficial
 to the current Concord steam customers if Concord Steam renewed their
 current lease with the state and upgraded existing equipment and
 infrastructure vs. a new plant somewhere else.
- Determine ways the plant could be more efficient and provide more competitively priced steam. Are their other fuel sources that could be utilized that would be more cost effective and better for the environment?
- Determine the potential for Concord Steam to obtain outside funding to make infrastructure improvements to increase the efficiency of the plant.
- If the State were to raze the plant how much would it cost?

Shut Down of the Plant and Construction of a State Owned Plant or Decentralized Plant.

- If the State were to build a new more efficient power plant for themselves how much would it cost?
- What improvements would have to be made to the existing infrastructure on campus?
- What are the cost estimates to operate the new plant (staff,, supplies, fuel)
- Would it be more cost effective to have new decentralized heating instead of a central plant? How much would this cost?



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<u>Financial Impact of City/State Withdrawal on Remaining Concord</u> <u>Steam Customer Base</u>

- What percent of the customer base does the State represent?
- What percent of the customer base does the City represent?
- What would the financial impact be if the State decided to convert all current state owned buildings currently on Concord Steam to another heating source?
- What would the financial impact be if the City decided to convert all current city owned buildings currently on Concord Steam to another heating source?
- What would the financial impact be if the City and the State decided to convert all current city owned buildings currently on Concord Steam to another heating source?

Lease Decisions

- If it is determined that the State should renew the lease, what minimum term will be required?
- If the State renews the lease, clear lines of delineation regarding maintenance responsibilities need to be developed. Please recommend where these respective areas of responsibility would be
- What steam infrastructure will Concord Steam be required to maintain?
 What improvements will Concord Steam be required to make and when?
 Who will be responsible for hazardous waste abatement?
- How will steam rates be calculated?
- What is the market rate to rent a facility for this purpose?
- What other potential sources of income are there for the State? (Rent from microwave)
- Determine the potential for a long term pricing agreement with Concord steam
- Will Concord Steam continue to operate steam plant to generate electricity and sell the state waste steam?
- Determine the amount of repairs and cost to repair and maintain the current tunnel system.
- Determine if the condensate system can be repaired and or determine how Concord Steam can recapture the condensate.